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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/702,646	11/07/2003	Tetsuro Tojo	244779US3	3064

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EXAMINER	
PATEL, TAYAN B	

ART UNIT	PAPER NUMBER
1795	

NOTIFICATION DATE	DELIVERY MODE
03/03/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/702,646	TOJO ET AL.	
	Examiner	Art Unit	
	TAYAN PATEL	1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 December 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claim 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tojo et al (WO 01/77412 - US 6818105 is the English language equivalent from where citations will be referenced) in view of Hoffman et al (US 2001/0051128).

Regarding claims 1 and 4, Tojo et al. discloses a fluorine gas generator for generating fluorine gas by electrolysis of a mixed molten-salt comprising hydrogen fluoride, the fluorine gas generating apparatus comprising an electrolytic cell, 3, equipped with (See column 6, lines 1-24; See also figure 1):

a hydrogen fluoride (HF) feed line, 26, where one end is connected to a HF inlet disposed in the electrolytic bath (See column 10, lines 45-67; See also fig. 1);

an inert gas substitution means (pressuring cylinder, 18, that provides/substitutes an inert gas into the space above the molten electrolyte which space is open to the HF feed line) (See column 6, lines 10-24; See also column 7, lines 45-57) located downstream in relation to the HF gas feed line (See figure 1) on the occasion of interruption/in case of emergency of HF gas feeding.

However, Tojo et al does not expressly describe the HF line where one end is connected to a hydrogen fluoride gas supply source and a first automatic valve disposed on said HF gas feed line.

Hoffman also describes an apparatus for generating HF (See abstract) wherein a HF gas supply source (box encircled with HF supply leading to pump 312) and valve, 318, are provided for regulating the amount of materials introduced into the mixing tank (See pages 5-6, para 85; see also figure 3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the HF gas supply source and valve in Hoffman et al in the apparatus of Tojo et al which describes the HF gas supply source and inlet into the tank in order for regulating the amount of materials introduced into the mixing tank.

With regard to claim 2, Tojo et al. further discloses a detecting means, 8 and 9 (level probes), for detecting an interruption of feeding of the HF gas (See column 7, lines 8-17),

an inert gas feed line (line in figure 1 that leads from the pressuring cylinder, 18, to the anode chamber, 5); and a second automatic valve, 62 (See column 7, lines 25-35), disposed on said inert gas feed line. See figure 1.

With regard to claims 3 and 5 as applied to claims 1, 2 and 4 above, Tojo et al. further discloses an inert gas storage tank, 18, for storing the inert gas to be fed to the inert gas feed line. See column 7, lines 45-57.

Response to Arguments

Applicant's arguments, see Remarks, filed 10 December 2007, with respect to claims 1-5 have been fully considered and are persuasive. The rejection of claims 1-5 has been withdrawn.

Applicant is kindly requested to review the new arguments presented above, *supra*. Hoffman et al overcomes the deficiency of a valve on the HF supply line. In addition, Hoffman et al provides an HF supply source. See figure 3.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tayan B. Patel, Esq. whose telephone number is (571) 272-9806. The examiner can normally be reached on Monday-Thursday, 7:30-5:00 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Neckel D. Alexa can be reached on (571) 272-1446. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Harry D Wilkins, III/
Primary Examiner, Art Unit 1795

/T. P./

Examiner, Art Unit 1795